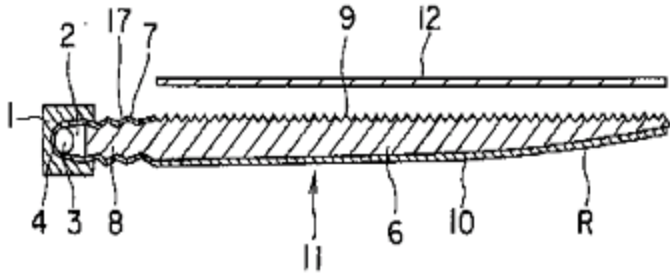


Exhibit F

U.S. Patent No. 7,404,660 B2	H06-242321
<p>1. A light emitting panel assembly comprising:</p>	<p>The H06-242321 Reference discloses a light emitting panel assembly.</p> <p>"The present invention relates to surface light emission members for use in backlights in order to shine light on the rear surface of the transparent panels and the like in respect of liquid crystal display surfaces, photographic films or drawings." Paragraph [0001], Figs. 1 and 2of the H06-242321 Reference.</p> <div style="text-align: center;"> <p>Figure 1</p> </div> <div style="text-align: center;"> <p>Figure 2</p> </div>

Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

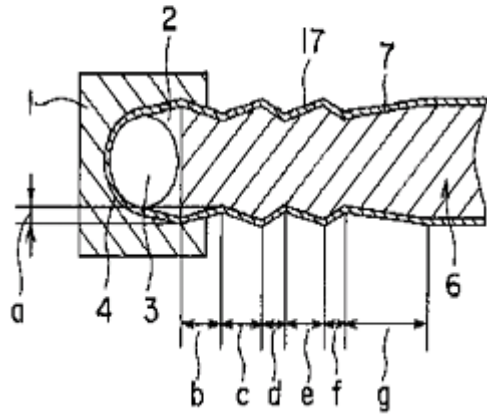
U.S. Patent No. 7,404,660 B2	H06-242321
<p>a generally planar optical conductor having at least one input edge with a greater cross-sectional width than thickness; and</p>	<p>The H06-242321 Reference discloses a generally planar optical conductor having at least one input edge with a greater cross-sectional width than thickness.</p> <p>“A light guide panel 6 (3 mm thick) comprised of a translucent acrylic panel of a rectangular surface in plan view (150 mm x 100 mm) is fitted and fixed in the groove means 2 of the light source holder 1...” Paragraph [0008], lines 1-4 of the H06-242321 Reference.</p> <p>“[T]he present invention has as a first feature a device in which a light source 3 is contained inside and attached to a light source holder 1, and a base end portion of a translucent plate-like optical waveguide 6 is affixed along a cross-section of an opening of the light source holder 1...” Paragraph [0004], lines 1-5 of the H06-242321 Reference.</p> <p style="text-align: center;">Figure 2</p> 

Invalidity Claim Chart for U.S. Patent No. 7,404,660**Exhibit D-15**

U.S. Patent No. 7,404,660 B2	H06-242321
<p>a plurality of light sources configured to generate light having an output distribution defined by a greater width component than height component, the light sources positioned adjacent to the input edge, thereby directing light into the optical conductor;</p>	<p>The H06-242321 Reference discloses a plurality of light sources configured to generate light having an output distribution defined by a greater width component than height component, the light sources positioned adjacent to the input edge, thereby directing light into the optical conductor.</p> <p>“For this reason, the light guide panel of the backlight device had to be separated from the liquid crystal panel in order to sustain a uniform luminance on the display surface, moreover, when the illuminated area was great, light sources had to be fitted to both terminal sides of the light guide panel...” Paragraph [0003], lines 5-10 of the H06-242321 Reference.</p> <p>“[T]he present invention has as a first feature a device in which a light source 3 is contained inside and attached to a light source holder 1, and a base end portion of a translucent plate-like optical waveguide 6 is affixed along a cross-section of an opening of the light source holder 1...” Paragraph [0004], lines 1-5 of the H06-242321 Reference.</p> <p>“A light guide panel 6 (3 mm thick) comprised of a translucent acrylic panel of a rectangular surface in plan view (150 mm x 100 mm) is fitted and fixed in the groove means 2 of the light source holder 1...” Paragraph [0008], lines 1-4 of the H06-242321 Reference.</p>

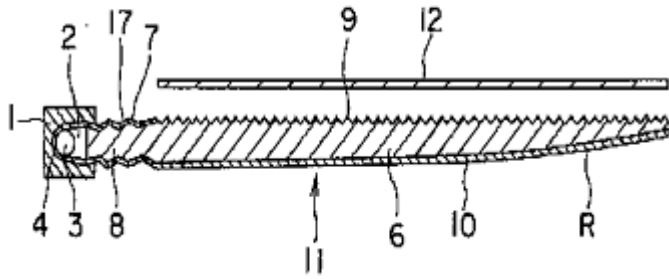
Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p style="text-align: center;">Figure 3</p>  <p>Further, this element is inherent to a person of skill in the art reading the H06-242321 Reference.</p>
<p>the optical conductor having at least one output region and a predetermined pattern of deformities configured to cause light to be emitted from the output region,</p>	<p>The H06-242321 Reference discloses an optical conductor having at least one output region and a predetermined pattern of deformities configured to cause light to be emitted from the output region.</p> <p>“A surface asperity 9 with a saw-toothed cross section, so as to form 90° isosceles triangle shaped mountains and valleys with a depth of 0.1 mm and a pitch of 0.4 mm over the entirety thereof, is formed in parallel with the long direction along from the terminal means of said light projecting reflective surface 7 to the terminal means of the light guide panel 6 of the surface side of the light guide panel 6.” Paragraph [0009], lines 1-7 of the H06-242321 Reference.</p>

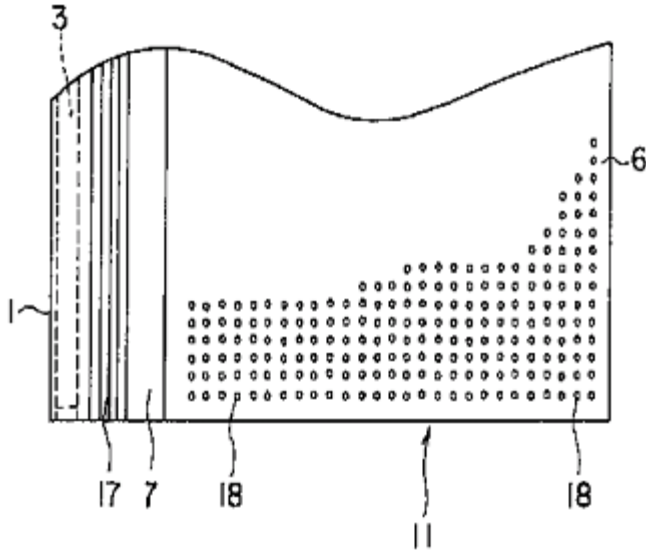
Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p data-bbox="976 250 1906 505">“The light escaping from the interior of the tunnel means 8 to shine into the light guide panel 6, is not only repeatedly reflected at the reflective surface 10 of the rear surface of the light guide panel 6 to be refracted and reflected at the surface asperity 9 of the surface of the light guide panel 6, but also concentrated to the tip terminal side of the light guide 6 by means of the curved surface of the tip terminal side of the rear surface.” Paragraph [0009], lines 7-14 of the H06-242321 Reference</p> <p data-bbox="1213 542 1388 597" style="text-align: center;">Figure 2</p>  <p data-bbox="976 984 1906 1382">“Furthermore, instead of the reflective surface 10 on the entire rear side of the rear surface of the light guide panel 6, as illustrated in Figures 5 and 6 [mistake in original JP disclosure], the reflective points 18 of a printed or coated means and the like may be enabled over the entire rear side arrayed fore and aft, and left and right. In comparing the distance of the reflective points 18 in this case from the light source 3, the reflective points 18 nearest the light source 3 are caused to be smaller, and if they are caused to be gradually larger in moving away from the light source 3, a remarkably increased sustenance of the uniformity of the luminosity of the light guide panel 6 is enabled.” Paragraph [0013], lines 1-11 of the H06-242321 Reference</p>

Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p style="text-align: center;">Figure 5</p> 
<p>the optical conductor having a transition region disposed between the light source and the output region.</p>	<p>The H06-242321 Reference discloses an optical conductor having a transition region disposed between the light source and the output region.</p> <p>“The light projected through the interior of the tunnel means 8 to shine into the light guide panel 6 when refracted and reflected at the surface asperity 9 on the surface side of the light guide 6.” Paragraph [0006], lines 4-6 of the H06-242321 Reference.</p>

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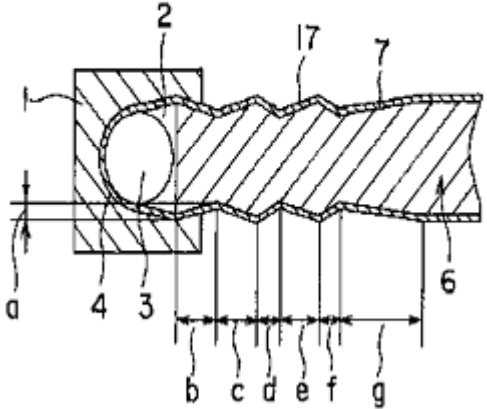
Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p>the light guide panel 6. The light escaping from the interior of the tunnel means 8 to shine into the light guide panel 6, is not only repeatedly reflected at the reflective surface 10 of the rear surface of the light guide panel 6 to be refracted and reflected at the surface asperity 9 of the surface of the light guide panel 6, but also concentrated to the tip terminal side of the light guide 6 by means of the curved surface of the tip terminal side of the rear surface. Because of this, even if there is proximity or gap in respect of the distance of the light source 3 in the light guide panel 6, a uniform luminosity is sustained from the basal terminal means side to the tip terminal means side.” Paragraph [0010], lines 1-71 of the H06-242321 Reference</p> <p>“Moreover, instead of the surface means and the rear surface means of the reflected light projecting surface 7, if the refracted and reflected angles of the light in the interior of the tunnel means 8 as the specifically shaped surface asperity 17 as represented in Figures 2 and 3 are adjusted, the projection of the light to a much greater depth is enabled. In the case of this embodiment, in explaining the dimension of each of the slanted surfaces of the surface asperity employed, as illustrated in Figure 3, it is comprised of a depth a of 0.5 mm, a first slanted surface b of 2 mm, a second slanted surface c of 2 mm, a third slanted surface d of 1 mm, a fourth slanted surface e of 2 mm, a fifth slanted surface f of 1 mm, and a sixth slanted surface g of 4 mm.” Paragraph [0012] of the H06-242321 Reference</p>

Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p style="text-align: center;">Figure 3</p> 
<p>3. The assembly of claim 1 wherein the transition region is integral with the optical conductor.</p>	<p>The JP05196820A Patent discloses an assembly wherein the transition region is integral with the optical conductor.</p> <p>“[A] tunnel portion 8 which is vertically enclosed by reflective faces 7 which causes light from the light source 3 to reflect towards the forward end of the optical waveguide 6 is provided to the base end side of the optical waveguide 6, uneven ridges 17 which form V-shapes and upside-down V-shapes when viewed from the side are formed on the reflective faces 7 of the tunnel portion 8, and light incident from the light source 3 is projected beyond the forward end of the optical waveguide 6.” Paragraph [0004], lines 13-21 of the H06-242321 Reference</p>

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H06-242321

Figure 1

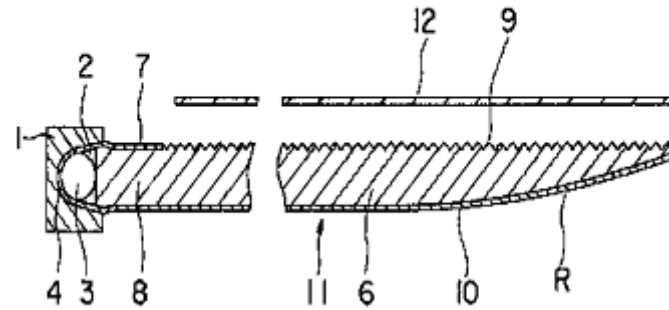
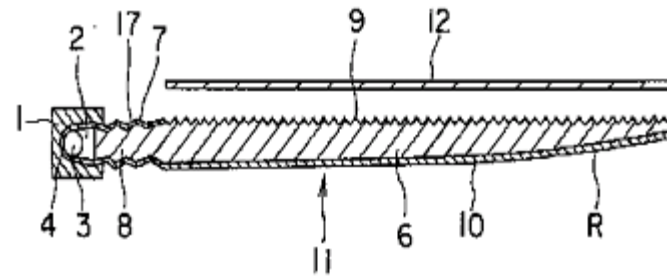
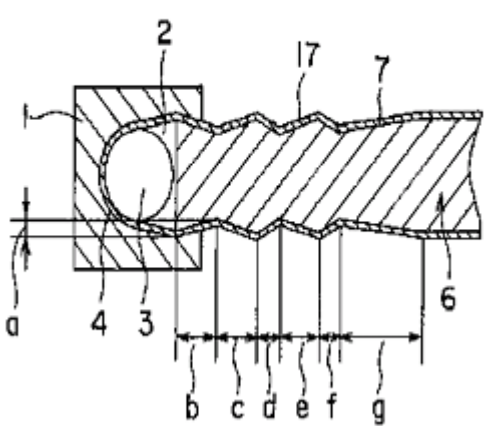


Figure 2



U.S. Patent No. 7,404,660 B2	H06-242321
	<p style="text-align: center;">Figure 3</p> 
<p>10. The assembly of claim 1 wherein the transition region and the output region of the optical conductor have substantially the same thickness.</p>	<p>The JP05196820A Patent discloses an assembly wherein the transition region and the output region of the optical conductor have substantially the same thickness.</p> <p>“[A] tunnel portion 8 which is vertically enclosed by reflective faces 7 which causes light from the light source 3 to reflect towards the forward end of the optical waveguide 6 is provided to the base end side of the optical waveguide 6, uneven ridges 17 which form V-shapes and upside-down V-shapes when viewed from the side are formed on the reflective faces 7 of the tunnel portion 8, and light incident from the light source 3 is projected beyond the forward end of the optical waveguide 6.” Paragraph [0004], lines 13-21 of the H06-242321 Reference</p>

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Figure 1

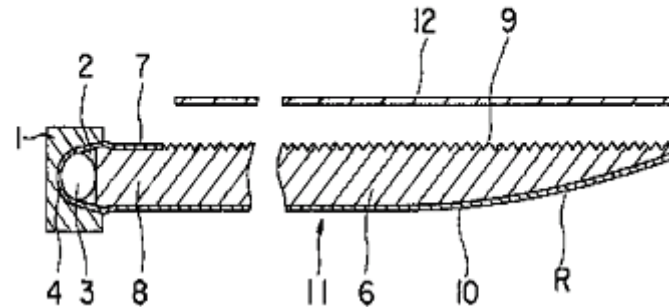
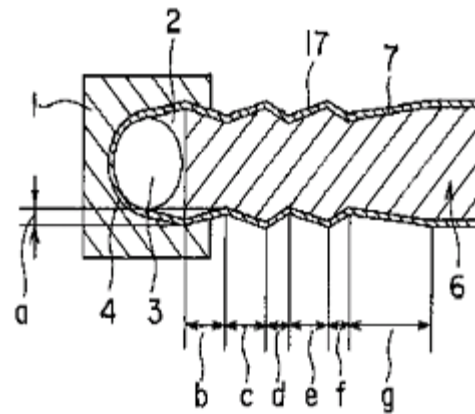


Figure 3



17. The assembly of claim **16** wherein the focused light sources are LEDs.

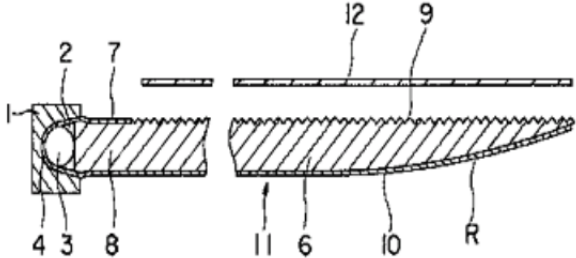
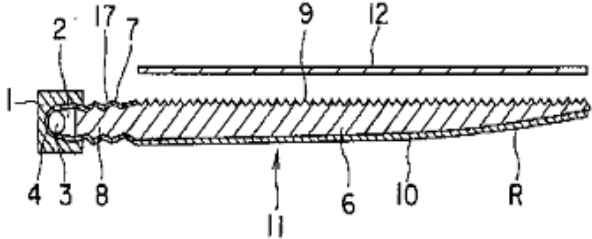
To the extent that Plaintiff alleges that this reference does not disclose this element, one of ordinary skill in the art would have been motivated to combine this reference with any other reference in the Exhibits to the filed Invalidity Contentions which discloses this limitation. For

Invalidity Claim Chart for U.S. Patent No. 7,404,660**Exhibit D-15**

U.S. Patent No. 7,404,660 B2	H06-242321
	<p>example, one of ordinary skill in the art would have been motivated to combine this reference with U.S. Patent No. 5,453,855 to Nakamura et al. ('the '855 patent) as charted separately in the Exhibit D to the originally filed Invalidity Contentions. The teachings of these references show that they are in the same field of backlighting and display technology and that each aims to solve the same general problem of controlling the light distribution, brightness, and efficiency of the display. Because the references are in the same field, address the same technology, and are intended to solve the same general problem, one of ordinary skill in the art would have found it obvious to combine the references, rendering the asserted patent obvious.</p>
<p>25. The assembly of claim 1 further comprising a tray in which the optical conductor is received.</p>	<p>To the extent that Plaintiff alleges that this reference does not disclose this element, one of ordinary skill in the art would have been motivated to combine this reference with any other reference in the Exhibits to the filed Invalidity Contentions which discloses this limitation. For example, one of ordinary skill in the art would have been motivated to combine this reference with U.S. Patent No. 5,453,855 to Nakamura et al. ('the '855 patent) as charted separately in the Exhibit D to the originally filed Invalidity Contentions. The teachings of these references show that they are in the same field of backlighting and display technology and that each aims to solve the same general problem of controlling the light distribution, brightness, and efficiency of the display. Because the references are in the same field, address the same technology, and are intended to solve the same general problem, one of ordinary skill in the art would have found it obvious to combine the references, rendering the asserted patent obvious.</p>
<p>33. A light emitting panel assembly comprising:</p>	<p>The H06-242321 Reference discloses a light emitting panel assembly.</p> <p>“The present invention relates to surface light emission members for use in backlights in order to shine light on the rear surface of the transparent panels and the like in respect of liquid crystal display surfaces,</p>

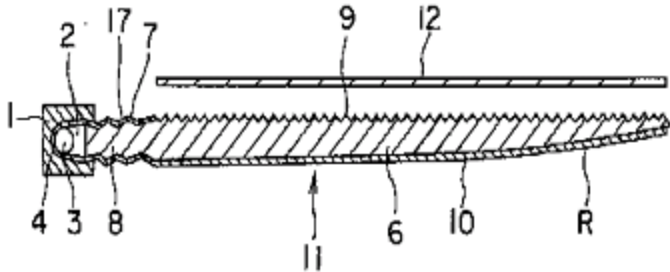
Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p>photographic films or drawings.” Paragraph [0001], Figs. 1 and 2 of the H06-242321 Reference.</p> <p style="text-align: center;">Figure 1</p>  <p style="text-align: center;">Figure 2</p> 
<p>a generally planar optical conductor having at least one input edge with a greater cross-sectional width than thickness; and</p>	<p>The H06-242321 Reference discloses a generally planar optical conductor having at least one input edge with a greater cross-sectional width than thickness.</p> <p>“A light guide panel 6 (3 mm thick) comprised of a translucent acrylic</p>

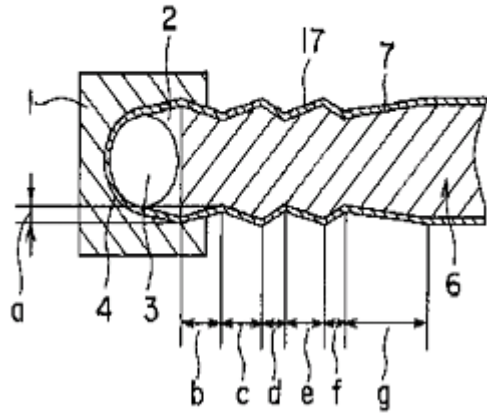
Invalidity Claim Chart for U.S. Patent No. 7,404,660

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U.S. Patent No. 7,404,660 B2	H06-242321
	<p>panel of a rectangular surface in plan view (150 mm x 100 mm) is fitted and fixed in the groove means 2 of the light source holder 1...” Paragraph [0008], lines 1-4 of the H06-242321 Reference.</p> <p>“[T]he present invention has as a first feature a device in which a light source 3 is contained inside and attached to a light source holder 1, and a base end portion of a translucent plate-like optical waveguide 6 is affixed along a cross-section of an opening of the light source holder 1...” Paragraph [0004], lines 1-5 of the H06-242321 Reference.</p> <p style="text-align: center;">Figure 2</p> 
<p>a plurality of LED light sources each having a greater width than height positioned adjacent to the input edge, thereby directing light into the optical conductor, each light source being configured to generate light having an output distribution defined by a greater width component than height component;</p>	<p>The H06-242321 Reference discloses a plurality of light sources configured to generate light having an output distribution defined by a greater width component than height component, the light sources positioned adjacent to the input edge, thereby directing light into the optical conductor.</p> <p>“For this reason, the light guide panel of the backlight device had to be separated from the liquid crystal panel in order to sustain a uniform luminance on the display surface, moreover, when the illuminated area</p>

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Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p>was great, light sources had to be fitted to both terminal sides of the light guide panel...” Paragraph [0003], lines 5-10 of the H06-242321 Reference.</p> <p>“[T]he present invention has as a first feature a device in which a light source 3 is contained inside and attached to a light source holder 1, and a base end portion of a translucent plate-like optical waveguide 6 is affixed along a cross-section of an opening of the light source holder 1...” Paragraph [0004], lines 1-5 of the H06-242321 Reference.</p> <p>“A light guide panel 6 (3 mm thick) comprised of a translucent acrylic panel of a rectangular surface in plan view (150 mm x 100 mm) is fitted and fixed in the groove means 2 of the light source holder 1...” Paragraph [0008], lines 1-4 of the H06-242321 Reference.</p> <p style="text-align: center;">Figure 3</p>  <p>To the extent that Plaintiff alleges that this reference does not disclose</p>

Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

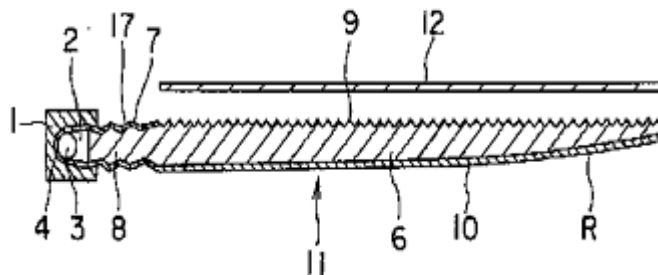
U.S. Patent No. 7,404,660 B2	H06-242321
	<p>the element of LED light sources, one of ordinary skill in the art would have been motivated to combine this reference with any other reference in the Exhibits to the filed Invalidity Contentions which discloses this limitation. For example, one of ordinary skill in the art would have been motivated to combine this reference with U.S. Patent No. 5,453,855 to Nakamura et al. (‘the ‘855 patent) as charted separately in the Exhibit D to the originally filed Invalidity Contentions. The teachings of these references show that they are in the same field of backlighting and display technology and that each aims to solve the same general problem of controlling the light distribution, brightness, and efficiency of the display. Because the references are in the same field, address the same technology, and are intended to solve the same general problem, one of ordinary skill in the art would have found it obvious to combine the references, rendering the asserted patent obvious.</p>
<p>the optical conductor having at least one output region and a predetermined pattern of deformities configured to cause light to be emitted from the output region,</p>	<p>The H06-242321 Reference discloses an optical conductor having at least one output region and a predetermined pattern of deformities configured to cause light to be emitted from the output region.</p> <p>“A surface asperity 9 with a saw-toothed cross section, so as to form 90° isosceles triangle shaped mountains and valleys with a depth of 0.1 mm and a pitch of 0.4 mm over the entirety thereof, is formed in parallel with the long direction along from the terminal means of said light projecting reflective surface 7 to the terminal means of the light guide panel 6 of the surface side of the light guide panel 6.” Paragraph [0009], lines 1-7 of the H06-242321 Reference.</p> <p>“The light escaping from the interior of the tunnel means 8 to shine into the light guide panel 6, is not only repeatedly reflected at the reflective surface 10 of the rear surface of the light guide panel 6 to be refracted and reflected at the surface asperity 9 of the surface of the light guide panel 6, but also concentrated to the tip terminal side of the light guide 6 by means of the curved surface of the tip terminal side of the rear</p>

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H06-242321

surface.” Paragraph [0009], lines 7-14 of the H06-242321 Reference

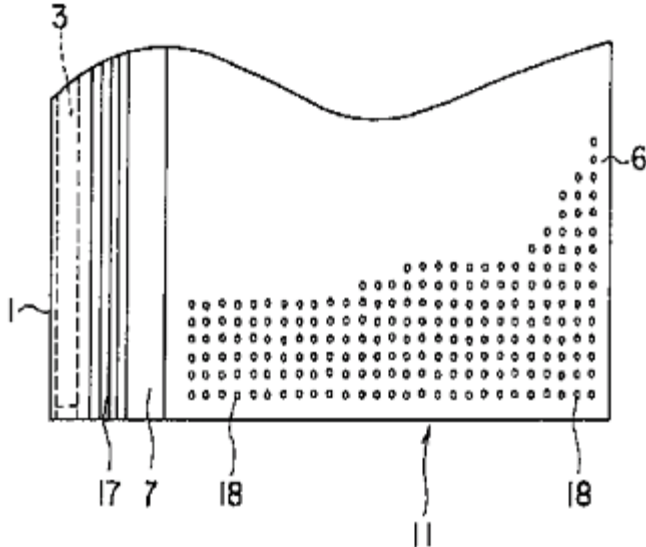
Figure 2



“Furthermore, instead of the reflective surface 10 on the entire rear side of the rear surface of the light guide panel 6, as illustrated in Figures 5 and 6 [mistake in original JP disclosure], the reflective points 18 of a printed or coated means and the like may be enabled over the entire rear side arrayed fore and aft, and left and right. In comparing the distance of the reflective points 18 in this case from the light source 3, the reflective points 18 nearest the light source 3 are caused to be smaller, and if they are caused to be gradually larger in moving away from the light source 3, a remarkably increased sustenance of the uniformity of the luminosity of the light guide panel 6 is enabled.” Paragraph [0013], lines 1-11 of the H06-242321 Reference

Invalidity Claim Chart for U.S. Patent No. 7,404,660

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U.S. Patent No. 7,404,660 B2	H06-242321
	<p style="text-align: center;">Figure 5</p> 
<p>the optical conductor having a transition region disposed between the light source and the output region.</p>	<p>The H06-242321 Reference discloses an optical conductor having a transition region disposed between the light source and the output region.</p> <p>“The light projected through the interior of the tunnel means 8 to shine into the light guide panel 6 when refracted and reflected at the surface asperity 9 on the surface side of the light guide 6.” Paragraph [0006], lines 4-6 of the H06-242321 Reference.</p>

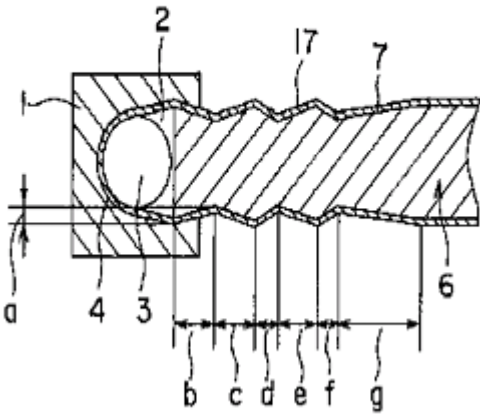
Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p>the light guide panel 6. The light escaping from the interior of the tunnel means 8 to shine into the light guide panel 6, is not only repeatedly reflected at the reflective surface 10 of the rear surface of the light guide panel 6 to be refracted and reflected at the surface asperity 9 of the surface of the light guide panel 6, but also concentrated to the tip terminal side of the light guide 6 by means of the curved surface of the tip terminal side of the rear surface. Because of this, even if there is proximity or gap in respect of the distance of the light source 3 in the light guide panel 6, a uniform luminosity is sustained from the basal terminal means side to the tip terminal means side.” Paragraph [0010], lines 1-71 of the H06-242321 Reference</p> <p>“Moreover, instead of the surface means and the rear surface means of the reflected light projecting surface 7, if the refracted and reflected angles of the light in the interior of the tunnel means 8 as the specifically shaped surface asperity 17 as represented in Figures 2 and 3 are adjusted, the projection of the light to a much greater depth is enabled. In the case of this embodiment, in explaining the dimension of each of the slanted surfaces of the surface asperity employed, as illustrated in Figure 3, it is comprised of a depth a of 0.5 mm, a first slanted surface b of 2 mm, a second slanted surface c of 2 mm, a third slanted surface d of 1 mm, a fourth slanted surface e of 2 mm, a fifth slanted surface f of 1 mm, and a sixth slanted surface g of 4 mm.” Paragraph [0012] of the H06-242321 Reference</p>

Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p style="text-align: center;">Figure 3</p> 
<p>34. The assembly of claim 33 wherein each light source has a light output distribution with a greater width component than height component.</p>	<p>The H06-242321 Reference discloses an assembly wherein each light source has a light output distribution with a greater width component than height component.</p> <p>“[T]he present invention has as a first feature a device in which a light source 3 is contained inside and attached to a light source holder 1, and a base end portion of a translucent plate-like optical waveguide 6 is affixed along a cross-section of an opening of the light source holder 1...” Paragraph [0004], lines 1-5 of the H06-242321 Reference.</p> <p>“A light guide panel 6 (3 mm thick) comprised of a translucent acrylic panel of a rectangular surface in plan view (150 mm x 100 mm) is fitted and fixed in the groove means 2 of the light source holder 1...” Paragraph [0008], lines 1-4 of the H06-242321 Reference.</p>

Invalidity Claim Chart for U.S. Patent No. 7,404,660

Exhibit D-15

U.S. Patent No. 7,404,660 B2	H06-242321
	<p data-bbox="976 251 1900 649">“In describing the embodiments in detail represented in the figures hereafter, the light holder 1 (Total length 150 mm) with a reverse C cross section formed from white colored polycarbonate and the like has groove means 2 provided in the long direction thereof from one terminal means thereof to the other terminal means on the inner side surface, and a pole shaped light source 3 comprised of a cold cathode fluorescent lamp and the like in the interior of said groove 2, and the light reflected by the reflective surface 4 comprised of a coating of reflective paint and the like on the inner surface of the groove means 2 in the periphery of the light source 3 is all caused to be shone from the aperture surface side of the groove means 2.” Paragraph [0007] of the H06-242321 Reference</p> <p data-bbox="1113 714 1291 771" style="text-align: center;">Figure 3</p> 